## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-119237

(43) Date of publication of application: 30.04.1999

(51)Int.CI.

G02F 1/1343

G02F 1/136

(21)Application number: 09-283834

uozi 1/100

(22)Date of filing:

16,10,1997

(71)Applicant: MITSUBISHI ELECTRIC CORP

(72)Inventor: NIWANO YASUNORI

MASUTANI YUICHI NAKAJIMA TAKESHI

OODOI YUUZOU

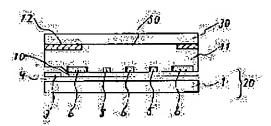
**KOBAYASHI KAZUHIRO** 

## (54) INTRA-FACE SWITCHING TYPE LIQUID CRYSTAL DISPLAY DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a high quality liquid crystal display device(LCD) having a wide aperture part by improving a shielding effect against a leaked electric field from a signal line and reducing the light shielding area.

SOLUTION: The LCD is constituted of a thin film transistor(TFT) array substrate 20 provided with scanning lines, signal lines 3, pixels formed by crossing the scanning lines and signal lines 3, TFTs formed on the pixles, driving electrodes 5 connected to the TFTs, counter electrodes 6 arranged opposedly to the electrodes 5, and TFT(thin film transistor) equipped with common wrings for connecting each counter electrode 6 to a counter electrode of another pixel, a counter substrate 30 arranged counter to the substrate 20 and liquid crystal 11 sealed into a gap between both the substrates 20, 30 and allowed to be driven by the electrodes 5, 6 by generating an electric field in parallel with the surfaces of the substrates 20, 30. On the substrate 20, the electrodes 50, 60 are formed on a layer different from a layer forming the signal lines 3 and close to the liquid crystal 11.



## LEGAL STATUS

[Date of request for examination]

20.08.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C): 1998,2003 Japan Patent Office